cuit with the current of injury, but in an opposite direction, so much of the current from the cell as will exactly balance the current of injury, *i. e.*, so much as will keep the meniscus of the electrometer from moving in either a positive or a negative direction when connected with the circuit.

Numerous advantages are presented by the form of electrometer here shown. It fits the stage of the microscope. The microscope need not be tilted very far, and the observer is therefore in a comfortable position. The position of the electrometer on the stage may readily be changed. All the parts near the acid are of hard rubber, thus excluding currents that might arise from acid touching metal parts. The acid tube is flanged so that the acid can not creep out along the capillary tube. The capillary can easily be brought against the wall of the acid tube. The tube from which the capillary springs descends within the acid tube, thus protecting the capillary against breakage. Either tube may at once be removed from its holder. The platinum wires extend to the binding post, and are not simply short pieces soldered to copper wire. The wire to the capillary tube extends to the bottom of the tube, thus maintaining the contact until all the mercury in the tube is used.

About one cubic centimeter of paraffin oil should be placed above the piston. Only absolutely clean double-distilled mercury should be used.

W. T. PORTER.
HARVARD MEDICAL SCHOOL.

QUOTATIONS.

RESEARCH WORK IN GREAT BRITAIN.

EXPLAIN some remarkable discovery of pure science to the ordinary man and he instantly wants to know what is the use of it or casts about for some way of utilizing it for profit. He neither understands very clearly how the discovery was arrived at nor the importance it possesses apart from immediate application to the meeting of daily wants. Yet nothing is more certain than that the applications of science which most fully subserve the wants of man depend in every considerable case upon the results obtained by men who had no practical application in view. He who finds out merely for the sake of finding out everything that can be known about a given subject has so far contributed to laying the foundations of advance as it is understood by the practical man. Without the discoveries thus made the practical man finds himself balked at every turn. For practical applications depend upon the combination of a great many factors, and demand a power of selection from a vast body of ascertained facts which are supplied only by the seeker after knowledge for its own sake. Of the knowledge thus acquired no man can say what part will be first utilized, or how long any portion may remain useless for practical purpose. That depends very much upon the progress made by research in other directions, hence many important results have been lost to sight merely because some link was missing in the chain connecting them with other known facts. In that case they have to be rediscovered, otherwise they in turn become the missing links, and for want of them other knowledge remains sterile.

Now it is too true that in this country, as Professor Nuttall complains, research is not a career. Pure science does not bring bread and butter. This country has often been fortunate in having men of means who devoted themselves to research for the love of truth, and it has had men like Faraday, of great simplicity of life, who were not merely content, but glad, to live on the income of a clerk while making discoveries that subsequently changed the face of society. But we can not depend upon a constant and adequate supply of either type. The field is now very large and very costly to work. There are many temptations to turn aside which we must expect to be too much for most men who do not possess compelling genius. Hence, if we do not provide a living wage and adequate equipment for a sufficient number of seekers after knowledge, we must expect to be beaten in practical affairs by nations which better understand their true interests. The London school loses promising men who go into practice. In one way or another every branch of research loses promising men, who either go into

practical affairs with what knowledge they have or make research itself subservient to money-getting by selling crude inventions, by self-advertisement, or by cooperation with financiers. We have no hierarchy of students on a living wage basis; and as a consequence we are very short of real teachers even for practical purposes. For the real teacher must be an advanced student, not a mere parrot reciting other men's work.—The London *Times*.

FALLS OF METEORS.

Dr. Edward S. Holden, of the U. S. Military Academy, has kindly sent us the following letters for publication:

A large meteor appeared at Leoti, Kans., between the hours of nine and ten the night of September 2. The sky was clear and the air cool. The meteor, or fire ball, appeared in the west at an angle of about forty-five degrees, crossed the heavens with a hissing sound and was lost in the east, about ten degrees above the sky line. It seemed large as a full moon, with ragged edges. For a moment everything was flooded with light. I think a full minute passed before thundering began in the east and following the path of the meteor across the heavens slowly died out in the west. I have seen meteors in this country at different times, but none as large or followed by thunder.

October 9, 1905. M. A. Marston.

A meteor is said to have fallen some years ago about fifty miles from here beside White Whale Lake. It is near an Indian reservation, and the Indians profess to have seen it fall, and hold it in a good deal of reverence. I have not yet seen the object, * * * I drove out to see the stone this summer, but found that it meant a long row up the lake in a very indifferent boat, so I put the excursion off till the ice comes, when it will be possible to drive right to the spot. Are there any observations that I could make upon this meteor, if it proves to be such, that you would care to have? If so, kindly let me know.

Chas. H. Huestis.

Edmonton, Alberta,
October 5, 1905.

THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY AND HARVARD UNIVERSITY.

We learn from the Boston *Transcript* that Harvard University has now formally abandoned all plans for a merger with the Massachusetts Institute of Technology. This action was taken at a meeting of the president and fellows on October 30, when the following letter was presented:

My dear President Eliot:

I am directed by the Corporation of the Institute of Technology to communicate to you the fact that, in view of the recent decision of the Supreme Court of the State in the case of John Wilson et al. *vs.* The Massachusetts Institute of Technology, the Corporation of the Institute finds it impossible to proceed with the plan of cooperation which was considered at its meeting of June 9.

In communicating this fact the corporation desires at the same time to express its appreciation of the fairness and courtesy of the Corporation of Harvard University in our common effort to solve a difficult question.

I am,

Very sincerely yours,

[Signed] Henry S. Pritchett,
October 11, 1905. *President.*

Thereupon it was voted that the committee of conference appointed by the Harvard board on May 16, 1904, at the instance of the corporation of the Massachusetts Institute of Technology, be discharged, and that the president be requested to express to the members of the two committees of conference the high appreciation by the president and fellows of the foresight, good judgment and public spirit of which the committees' project for a close affiliation between the institute and the university gives evidence, and the regret of the president and fellows that the project has been brought to naught by the recent decision of the supreme court, which makes it impossible for the institute to place itself beside the university.

SCIENTIFIC NOTES AND NEWS.

The Bolyai prize of the Hungarian Academy of Sciences, of which some account was recently given here, has been awarded to M. Poincaré.